

**EPA Superfund
Explanation of Significant Differences:**

**COMMENCEMENT BAY, NEAR SHORE/TIDE FLATS
EPA ID: WAD980726368
OU 22
PIERCE COUNTY, WA
11/29/1993**



Superfund Fact Sheet

September 29, 1993

Ruston/North Tacoma Study Area Tacoma, Washington

EPA Seeks Public Comment on Temporary Soil Storage

EPA is seeking public comment from **September 30 to October 30, 1993** on proposal to temporarily store soils excavated from the Ruston/North Tacoma Study Area on the Asarco smelter property. This fact sheet contains a summary of the proposal. Public comments should be sent to:

Mary Kay Voytilla
EPA Project Manager
1200 Sixth Avenue, HW-113
Seattle, Washington 98101

On August 9, 1993 EPA issued a Unilateral Administrative Order (Order) to Asarco, which directs Asarco to implement the final cleanup plan for contaminated residential soils (see background highlights); EPA's and Asarco's goals for 1993 are to begin the soil sampling program, and to use best efforts to complete cleanup actions at up to twenty properties, weather permitting.

One of the major elements of the cleanup plan involves the disposal of excavated soils at an appropriate off-site facility. Currently state dangerous waste regulations require that the soil be placed in a hazardous waste facility. The nearest such facility is located in Arlington, Oregon. There are two efforts currently underway which, if approved, could result in alternative disposal locations for soil excavated as part of the cleanup: 1) the dangerous waste exemption, and 2) the evaluation of alternatives for the smelter site cleanup. These efforts are discussed in more detail in the background highlights section of this fact sheet.

The alternative disposal locations could result in a significant overall savings in project costs, as well as a wiser use of our limited regional hazardous waste disposal capacity. Since final decisions have not yet been made on either of the two efforts, EPA would like to propose for your consideration the option of temporarily storing excavated residential soils on the smelter property for a limited time.

Temporary Storage Option

In the past, soil removed from the Expedited Response Action (ERA) sites was stored on the smelter property in the fine ore bins building. The fine ore bins are currently being used to store debris associated with smelter demolition. There is not enough room in the fine ore bins for ERA soils, demolition debris, and additional soil excavated as part of the upcoming residential soils cleanup. In addition, there are no other buildings on the smelter site suitable for soil storage. EPA and Asarco have therefore considered temporary soil storage in stockpiles on or near the smelter site. EPA believes that with proper controls, the temporary stockpiling of residential soils can be safely implemented. The temporary soil storage locations that have been considered include:

- B the stack hill,
 - B the south east plant area,
 - B the Yacht Club breakwater,
 - B the parking lot area,
 - B the north east plant area
- See Figure 1.

**Explanation of Significant Difference
to the Ruston/North Tacoma Study Area
Record of Decision
Ruston and Tacoma, Washington**

A. Introduction

1. Site name and location: Ruston/North Tacoma Study Area, Ruston and Tacoma, Washington, Operable Unit 04 of the Commencement Bay Nearshore/Tideflats Superfund Site.
2. Lead agency: U.S. Environmental Protection Agency (EPA).
3. Support agency: State of Washington Department of Ecology (Ecology).
4. Legal authorities for cleanup action: The Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA" or "Superfund"), 42 U.S.C. Section 9601, et seq., and the National Contingency Plan ("NCP"), 40 C.F.R. Part 300.

B. Summary of the Explanation of Significant Difference to the Ruston/North Tacoma Record of Decision

On June 16, 1993, EPA signed a Record of Decision (ROD) for the cleanup of soil and slag in the Ruston/North Tacoma Study Area. On August 9, 1993, EPA issued a Unilateral Administrative Order (Order) to Asarco, which directs Asarco to implement the final cleanup plan for contaminated residential soils described in the ROD (see section C below for summary of site history, contamination problems, and selected remedy). Asarco initiated a Yard-by-yard soil sampling program on October 18, 1993. Weather permitting, cleanup actions could start as early as mid-November, 1993.

One of the major elements of the cleanup plan involves the disposal of excavated soils at an appropriate off-site facility. Currently, state dangerous waste regulations require that the soil be placed in a hazardous waste facility. The nearest such facility is located in Arlington, Oregon. There are two efforts currently underway which, if approved, could result in alternative disposal locations for soils excavated as part of the cleanup: 1) the dangerous waste exemption, and 2) the evaluation of alternatives for the smelter site cleanup. These

C. Summary of Site History, Contamination Problems, and Selected Remedy

EPA and other federal, state, and local agencies have studied soil contamination in the residential area surrounding the Asarco Tacoma Smelter. The studies conclude that operations at the smelter resulted in emissions of contaminants, primarily heavy metals including arsenic and lead, that have settled in the soil surrounding the smelter. Arsenic is of concern because it is known to cause cancer. Lead is also of concern because exposure to lead is associated with developmental problems in children. In addition, some residential areas contain slag (a black, rock-like material containing arsenic and other metals) that was a waste product of the smelting process at Asarco. Slag has been used in residential areas for driveways and as rockeries and garden ornaments and remains in various locations within the Study Area today.

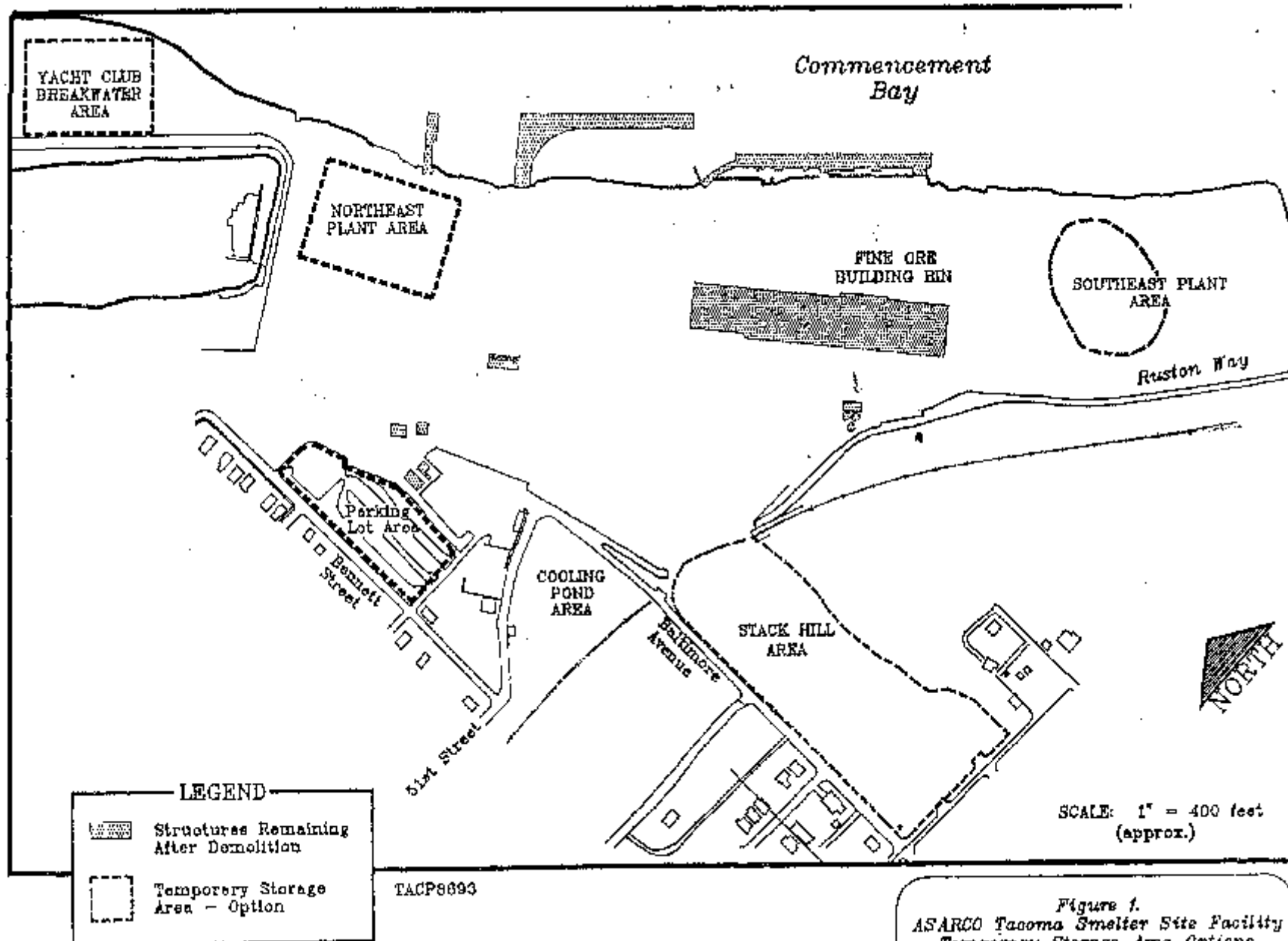
EPA completed a Remedial Investigation, Feasibility Study and Risk Assessment in February 1992. These studies served to characterize the extent of the residential soil contamination, assess potential risks to public health, and evaluate cleanup alternatives. Based on the results of these studies, EPA concluded that there is exposure within the community to the contaminated soil and that the potential human health risks posed by the contamination warrant cleanup. The primary risks from exposure to the contamination include increased risk of skin cancer from arsenic exposure and potential neurological effects from lead. In order to be protective of public health, EPA also used the studies to set action levels of 230 parts per million (ppm) for arsenic and 500 ppm for lead.

On June 16, 1993, EPA signed a Record of Decision (ROD) for the Ruston/North Tacoma Study Area. A summary of the cleanup plan called for in the ROD can be found in the background highlights section of the attached fact sheet (see Attachment 1).

D. Public Participation Activities

EPA held a public comment period from September 30, 1993 to October 30, 1993, on a proposal to temporarily store soils excavated from the Ruston/North Tacoma Study Area on the smelter property (see the Superfund Fact Sheet included as Attachment 1). A notice regarding the public comment period was published in The Morning News Tribune (a local newspaper), and the attached Fact Sheet was distributed to the Asarco projects mailing list of approximately 800 individuals. In addition, the Fact Sheet was made available for public review at the information repositories listed on the back page of the Fact Sheet (see Attachment 1). EPA received seven letters in response to the public comment

EXPLANATION OF SIGNIFICANT DIFFERENCE
to the Rushton/North Tacoma Study Area ROD



-
- B Excavation of slag driveways and other areas with small slag particles within the Study Area and replacement with gravel.
 - B Capping of dirt alleys and parking areas where soil exceeds action levels. The caps will either be made of asphalt, or the soil above action levels will be removed and replaced with clean gravel.
 - B Fencing of contaminated areas that are too steeply sloped to be excavated. These areas will also be planted with low lying shrubs.
 - B Disposal of residential soil at an appropriate off-site facility.
 - B Development of a Community Protection Measures (CPMs) program for the Study Area including:
 - B Measures to control soil disturbances.
 - B Soil testing, collection, and disposal program.
 - B Measures to maintain the integrity of soil caps.
 - B Development of a property specific data base.
 - B Notification to future property owners of property conditions.
 - B Evaluations of the effectiveness of the CPMs program.

Activities Related to Disposal of Contaminated Residential Soil

Dangerous waste exemption

Asarco has petitioned Ecology to exempt residential soil in the Ruston/North Tacoma area from the state dangerous waste regulations. Ecology proposed to conditionally exempt such soils. The exemption would call for educational measures on how to reduce exposure and appropriate disposal for soils with arsenic levels at or below the 230 ppm action level, and would provide criteria for disposal of soils with arsenic concentrations over the 230 ppm action level.

If the dangerous waste exemption is approved, other possible disposal locations for Study Area soil may become available. For example, there are non-hazardous waste landfills in the state which might meet the exemption requirements. Asarco is currently exploring such disposal options.

Evaluation of smelter site cleanup alternatives

In addition, before EPA selects a cleanup remedy for contaminated soil and ground water at the Asarco smelter site, EPA expects to consider a range of cleanup alternatives that may include consolidation of contaminated soil on the smelter site, treatment of contaminated soil and ground water, capping of contaminated soil, and excavation and off-site disposal of contaminated soil. It is possible that if EPA decides to select disposal on the smelter site, capacity may be available for Study Area soil also. EPA notes, however, that its decision on the cleanup of the Study Area is separate and apart from its decision on the cleanup of the smelter site. The selection of a cleanup remedy for the Asarco smelter site, including the possibility for disposal of Study Area soil in the future at the smelter, will be subject to further public review and comment.

For More Information

If you have any questions about cleanup activities, please contact one of the following EPA representatives toll free in Seattle at **1(800) 424-4EPA**, or as indicated:

Mary Kay Voytilla, Project Manager **(206) 553-2712**

Michelle Pirzadeh, Community Relations Coordinator **(206) 553-1272**

Attachment 2

Summary of Public Comments on Temporary Soil Storage and EPA's Responses

Below is a summary of comments received during the September 30, 1993-October 30, 1993 comment period regarding temporary storage of excavated residential soils on the Asarco smelter property. Some commenters expressed preferences or included remarks specifically related to the cleanup of the smelter site. These issues are not addressed below. Comments regarding the smelter site cleanup will be considered and addressed as part of a separate decisionmaking process.

1. COMMENT: Several commenters had questions about the storage timeframe, and the timeframe for making a determination about the final disposal location. One commenter felt that "temporary" storage would continue for many long years. Another wondered if it would be more cost effective to take soil to its permanent dump site immediately.

RESPONSE: Under this Explanation of Significant Difference, soils excavated from residential areas prior to December 31, 1994, could be temporarily stored in the north east area of the Asarco smelter facility. Soils excavated after December 31, 1994, would not be eligible for placement in temporary storage without further public comment.

EPA is providing this window of time (from now until December 31, 1994) in order to accommodate a full season of cleanup activities, and to allow final decisions to be made on the dangerous waste exemption and the smelter site cleanup. As discussed in the Fact Sheet (Attachment 1), these efforts, when finalized, could result in alternative protective disposal locations which significantly reduce project costs (by about \$20 million), and provide for a wiser use of our limited regional hazardous waste disposal capacity.

A decision regarding the dangerous waste exemption should be finalized by the end of this year (1993). EPA expects that a decision regarding the selected remedy for the smelter site will be finalized by Fall 1994. EPA would like to emphasize that December 31, 1994, is the deadline for a "decision" regarding the disposition of soils in temporary storage. Activities that could affect the selection of a permanent disposal facility, however, will be ongoing and will not be delayed until that date. EPA expects that a determination regarding the selection of a permanent disposal option for excavated residential soil will be made prior to that deadline.

If decisions on either the dangerous waste exemption or the selected remedy for the smelter site have not been finalized by

RESPONSE: EPA agrees that the north east plant area is the best temporary storage location. In addition to the characteristics noted above by the commenters, soil storage in the north east area appears to interfere the least with the ongoing smelter site cleanup.

4. COMMENT: One commenter was in favor of any temporary onsite storage option that EPA endorsed.

RESPONSE: EPA appreciates the comment.

5. COMMENT: The Washington Environmental Council and Citizens for a Healthy Bay asked for clarification on why the south east plant area was removed from consideration as a storage location.

RESPONSE: As noted in the Fact Sheet (Attachment 1), the stack hill, south east plant area, and Yacht Club breakwater were removed from further consideration for technical and practical reasons including accessibility, interference with the ongoing smelter site investigation, and visual impact.

Buried wood waste in the south east area has created unique organic contamination problems for the smelter site. In addition to the wood waste, there is a yet unidentified source of groundwater contamination to this area. EPA and Asarco plan to undertake additional investigations and monitoring in this area. The additional investigations will require the placement of further groundwater wells. Soil storage activities could interfere with the placement of these wells.

In addition, the placement of soil in temporary storage in this area would be directly visible and accessible from Ruston Way. The use of this area would require an additional traffic burden on the tunnel, which is already a concern to Ruston town officials and citizens. At the request of Ruston and Tacoma officials, Asarco has already changed the main transportation route from Ruston Way to Pearl Street.

6. COMMENT: The Town of Ruston questioned whether the substantive requirements of applicable state shoreline laws would be met.

RESPONSE: The northeast area of the Asarco facility is located within the Town of Ruston. EPA has reviewed the Town of Ruston's Master Program for Shoreline Development dated January 1974. Although this document was not formally identified by the State of Washington Department of Ecology (Ecology) as an applicable or relevant and appropriate requirement (ARAR), EPA

The outfall from this drainage system is periodically monitored for concentrations of lead, arsenic and cadmium, as well as other constituents.

Fugitive dust will be controlled at the soil loading area by spraying with water. Since the haul distance to the storage area is short, soils will still be moist upon arrival, and there should not be a problem with dust at the storage site. If circumstances arise that lead to dusty conditions, additional watering will be applied as the soils are being placed in the storage area.

8. COMMENT: The Washington Environmental Council did not believe that a vegetative cover would sufficiently control dust and run-off.

RESPONSE: In the Fact Sheet on temporary soil storage (Attachment 1), EPA called for a temporary plastic cover to be placed over any soil excavated during 1993. The Fact Sheet also stated that next construction season, the soil excavated during 1993, as well as soil excavated during 1994, would be seeded with a grass cover.

Following additional consideration of this issue, however, EPA has decided to forego the vegetative cover, and require the maintenance of a plastic cover over excavated soils. The plastic cover is as protective as the vegetative cover, but may be more appropriate considering the temporary nature of the stockpiles (i.e, vegetative covers can take some time after placement to become fully established). Use of the plastic cover will provide ongoing isolation of the soil from erosion, runoff, and precipitation (see response to Comment 7 above). In addition, because the soil will be located in the north east plant area, which is farther from the view of the residents, attractiveness is less of an issue. The plastic cover will be monitored and repaired as necessary.